# **AMENDMENTS TO THE CLAIMS**

This listing of the claims will replace all prior versions and listings of claims in the application:

## Listing of Claims:

1. (Currently Amended) A process for the preparation of a heteroaryl acetamide from a heteroaryl α-hydroxyacetamide, the process comprising directly hydrogenating the heteroaryl α-hydroxyacetamide in the presence of a strong acid, a halide, and a precious metal catalyst, the heteroaryl α-hydroxyacetamide having the structure of Formula 1 and the heteroaryl acetamide has the structure of Formula 1A:

$$R_{10}$$
 $R_{11}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{12}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R_{15}$ 
 $R_{15}$ 
 $R_{15}$ 
 $R_{15}$ 
 $R_{15}$ 

wherein

1A

Z is O, NR<sub>20</sub> or CR<sub>21</sub>;

 $X_1$  and  $X_2$  are independently selected from the group consisting of hydrogen, halogen,  $C_{1.4}$  alkoxy,  $C_{1.6}$  alkyl, -CF<sub>3</sub> and CH<sub>3</sub>SO<sub>2</sub>-;

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or hydrocarbyl;

 $R_{10}$  is hydrogen, halogen,  $C_{1.4}$  alkyl, or a member of a fused ring wherein the fused ring is (i) a substituted or unsubstituted, saturated or unsaturated, five or six-membered, hyeterocyclic or carbocyclic ring fused to the A ring comprising  $R_{10}$ , the carbon atom to which  $R_{10}$  is attached,  $R_{20}$ , and the nitrogen atom to which  $R_{20}$  is attached, or (ii) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising  $R_{10}$ ,  $R_{11}$ , and the carbon atoms to which  $R_{10}$  and  $R_{11}$  are attached, optionally substituted with Y at a substitutable position thereof;

 $R_{11}$  is hydrogen, halogen,  $C_{1.4}$  alkyl, or a member of a fused ring wherein the fused ring is (i) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising  $R_{10}$ ,  $R_{11}$ , and the carbon atoms to which  $R_{10}$  and  $R_{11}$  are attached, optionally substituted with Y at a substitutable position thereof, or (ii) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising  $R_{11}$ ,  $R_{12}$ , and the carbon atoms to which  $R_{11}$  and  $R_{12}$  are attached, optionally substituted with Y at a substitutable position thereof;

 $R_{12}$ , if present, is hydrogen, halogen,  $C_{1-4}$  alkyl, or a member of a fused ring wherein the fused ring is (i) a six-membered, aromatic, carbocyclic ring fused to the A ring comprising  $R_{11}$ ,  $R_{12}$ , and the carbon atoms to which  $R_{11}$  and  $R_{12}$  are attached, optionally substituted with Y at a substitutable position thereof;

 $R_{20}$  is  $C_{1.5}$  alkyl or a member of a fused ring wherein the fused ring is a substituted or unsubstituted, saturated or unsaturated, five or six-membered, heterocyclic or carbocyclic ring fused to the A ring comprising  $R_{10}$ , the carbon atom to which  $R_{10}$  is attached,  $R_{20}$ , and the nitrogen atom to which  $R_{20}$  is attached:

R<sub>21</sub> is hydrogen, halogen or C<sub>1-4</sub> alkyl;

n is 0 or 1:

each Y is independently hydrogen, halogen or C<sub>1-4</sub> alkyl; and when Z is CR<sub>21</sub>, the A ring is aromatic.

## 2-5. (Canceled)

- 6. (Original) The process of claim 1 wherein  $X_1$  and  $X_2$  are independently selected from the group consisting of hydrogen, halogen,  $C_{1.4}$  alkoxy and  $C_{1.8}$  alkyl,  $R_1$  and  $R_2$  are independently hydrogen or  $C_{1.5}$  alkyl and Y is hydrogen, halogen or  $C_{1.4}$  alkyl.
- 7. (Currently Amended) A process for the preparation of an imidazopyridine acetamide from an imidazolpyridine α-hydroxyacetamide, the process comprising directly hydrogenating the imidazopyridine α-hydroxyacetamide in the presence of a strong acid, a halide, and a <u>precious metal</u> catalyst, the imidazopyridine α-hydroxyacetamide has the structure of Formula 6 and the imidazopyridine acetamide has the structure of Formula 6A;

$$Y \longrightarrow N \longrightarrow N \longrightarrow X_2$$
 $O \longrightarrow N \longrightarrow N \longrightarrow N$ 
 $R_1 \longrightarrow R_2$ 

$$Y$$
 $N$ 
 $X_1$ 
 $X_2$ 
 $X_2$ 
 $X_3$ 
 $X_4$ 
 $X_4$ 
 $X_4$ 
 $X_4$ 
 $X_4$ 
 $X_5$ 
 $X_6$ 
 $X_7$ 
 $X_8$ 
 $X_8$ 

6A

### wherein

Y is hydrogen, halogen or C<sub>1-4</sub> alkyl;

 $X_1$  and  $X_2$  are independently selected from the group consisting of hydrogen, halogen,  $C_{1-4}$  alkoxy,  $C_{1-6}$  alkyl, -CF<sub>3</sub> and CH<sub>3</sub>SO<sub>2</sub>-; and

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or C<sub>1-5</sub> alkyl.

- 8-10. (Canceled)
- 11. (Original) The process of claim 7 wherein Y is methyl,  $X_1$  and  $X_2$  are independently hydrogen or methyl and  $R_1$  and  $R_2$  are methyl.
  - 12-13. (Canceled)
- 14. (Previously Presented) The process of claim 7 wherein the strong acid is sulfuric acid.
  - 15-16. (Canceled)
- 17. (Previously Presented) The process of claim 7 wherein the halide is a bromide ion.
  - 18-26. (Canceled)

 (Currently Amended) The process of claim 7 wherein the <u>precious metal</u> catalyst is a palladium catalyst.

28-29. (Canceled)

 (Currently Amended) The process of claim 27 wherein the <u>precious metal</u> catalyst is palladium on barium sulfate.

31-34. (Canceled)

35. (Original) A process for the preparation of an imidazopyridine acetamide from an imidazopyridine α-hydroxyacetamide, the process comprising directly hydrogenating an imidazopyridine α-hydroxyacetamide in the presence of hydrogen gas, a strong acid or mixture of strong acids with a pKa of about -9 or less, a chloride or bromide ion and a palladium catalyst, wherein the imidazopyridine α-hydroxyacetamide has the structure of Formula 7 and the imidazopyridine acetamide product has the structure of Formula 7A:

′

$$X_1$$
 $X_2$ 
 $X_3$ 
 $X_4$ 
 $X_4$ 

7A

### wherein

Y is C<sub>1-4</sub> alkvl:

X<sub>1</sub> C<sub>1-4</sub> alkyl; and

R<sub>1</sub> and R<sub>2</sub> are independently hydrogen or C<sub>1-5</sub> alkyl.

- 36. (Original) The process of claim 35 wherein Y, X<sub>1</sub>, R<sub>1</sub> and R<sub>2</sub> are methyl.
- 37. (Original) The process of claim 35 wherein the bromide or chloride ion is a bromide ion.
  - 38-40. (Canceled)
- 41. (Previously Presented) The process of claim 35 wherein the palladium catalyst is palladium on barium sulfate.
- 42. (Original) The process of claim 35 wherein the imidazopyridine α-hydroxyacetamide, the strong acid, the chloride or bromide ion and the palladium catalyst is dissolved in a solvent of methanol, ethanol, n-propanol, formic acid, acetic acid, ethanoic acid or propionic acid.
  - 43. (Canceled)

- 44. (Previously Presented) The process of claim 42 wherein the solvent is acetic
  - 45-46. (Canceled)
- 47. (Previously Presented) The process of claim 35 wherein the reaction temperature is about 70°C to about 75°C.
  - 48-49. (Canceled)
- 50. (Previously Presented) The process of claim 35 wherein the reaction pressure is about 2.0 atmospheres to about 2.8 atmospheres.
- 51. (Original) The process of claim 36 wherein the strong acid is sulfuric acid, the bromide or chloride ion is bromide ion and the catalyst is palladium on barium sulfate.
- 52. (Previously Presented) The process of claim 35 wherein the strong acid is sulfuric acid, the bromide or chloride ion is bromide ion and the catalyst is palladium on harium sulfate.
- 53. (Previously Presented) The process of claim 52 wherein the reaction temperature is about 70°C to about 75°C and the reaction pressure is about 2.0 atmospheres to about 2.8 atmospheres.
- 54. (New) The process of claim 1, wherein the process further comprises directly hydrogenating the heteroaryl α-hydroxyacetamide in the presence of hydrogen gas, in addition to the strong acid, the halide, and the precious metal catalyst.
- 55. (New) The process of claim 7, wherein the process further comprises directly hydrogenating the imidazolpyridine α-hydroxyacetamide in the presence of hydrogen gas, in addition to the strong acid, the halide, and the precious metal catalyst.